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Summary

Main Features

INFORMATION PAPER; REVIEW OF INTERSTATE MIGRATION METHOD, MARCH 2009

1. Introduction
2. Rebasing and Re-derivation of Interstate Migration
3. Review of Interstate Migration Method
4. Scenarios Analysed
5. Scenario Outcomes
6. Previous Interstate Migration Methods Used

Attachment 1. ERP and Components of Change, 2001 to 2006

SUMMARY

Within Australia there is no direct quarterly measure of interstate migration, unlike that of natural increase and net overseas migration. Instead, quarterly estimates of interstate migration are modelled using Medicare change of address data. This model is reviewed and updated every five years using data from the latest **Census of Population and Housing**.

Changes to the model, including updated expansion factors, have been applied to interstate migration estimates for September quarter 2006 and onwards. These estimates were released on the 18 March 2009 in **Australian Demographic Statistics, September Quarter 2008** (cat. no. 3101.0) and include the revision of preliminary estimates already published. The method described in this paper will be used for the intercensal period 2006 to 2011 and onwards until once again it is reviewed after data from the **2011 Census of Population and Housing** has been finalised.

The outcome of this current review is similar to the previous model used to estimate interstate migration from 2001 to 2006. This new model includes updated expansion factors based on data from the 2006 Census and additional Medicare data used to help measure multiple movers (i.e. persons who have moved more than once during the year prior to the 2006 Census). Expansion factors are used to account for an under coverage of Medicare change of address data by various ages and sex. The new model includes the following characteristics:

- Medicare data lagged by three months (both for calculating expansion factors and for estimating progressive quarters of interstate migration);

- smoothed inputs used to produce expansion factors (i.e. Census, Medicare & multiple movers data were smoothed);
- capping applied to expansion factors (in contrast to the 2001-2006 method); and
- expansion factors applied to males aged 17 to 30 years and females aged 17 to 25 (this differs to the age range used in both the 1996-2001 and 2001-2006 methods).

1. INTRODUCTION

In accordance with legislative requirements, the ABS provides quarterly estimates of the population of Australia and each of the states and territories. These population estimates, known as the estimated resident population (ERP), are published each quarter in **Australian Demographic Statistics** (cat. no. 3101.0).

The **Census of Population and Housing** provides the benchmark for post-censal population estimates once every five years. Post-censal ERP is then calculated forward each quarter by using the quarterly estimates of each of the three components of population change: natural increase (the excess of births over deaths); net overseas migration; and net interstate migration. Post-censal estimates of births and deaths are calculated using birth and death registrations, while overseas migration is calculated using data collected from passenger cards, visas and passports for those persons travelling into and out of Australia. Data on interstate migration, however, are not directly estimated. Instead, post-censal estimates of net interstate migration are modelled using administrative by-product data. This document describes the most recent review of the method used to produce quarterly post-censal estimates of interstate migration.

Currently, the data used by the ABS is information on change of address advised to Medicare Australia and to the Department of Defence in the case of the military. Every five years, after data from the following Census has been finalised, these modelled estimates are then reviewed against, and potentially replaced by, the interstate migration estimates that are calculated from the Census (i.e. rebased to the Census). This is known as the re-derivation of interstate migration and is mentioned later in this paper.

Strength of Medicare data as an indicator

The ABS has evaluated a range of potential sources of administrative data for estimating interstate migration on a quarterly basis. Medicare Australia data supplying change of address information was found to be the most effective source currently available. For more information, refer to the **Information Paper: Evaluation of Administrative Data Sources for Use in Quarterly Estimation of Interstate Migration** (cat. no. 3127.0.55.001).

Medicare card holders are required to register changes of address when they make claims, or when their cards are replaced. However, it is known that some people, particularly younger card holders, do not register changes of address with Medicare, or do so long after the fact. Comparison of Medicare change of address with census data on the address of respondents one year prior to the Census suggests that the level of under-reporting in Medicare is fairly constant over time. In addition, this under-reporting seems to be similar for interstate arrivals and interstate departures, as well as for each sex by various ages.

Defence force adjustment

Medicare theoretically covers all Australian usual residents as well as those non-Australian residents granted temporary registration. However, there are a range of Australian usual residents who do not access the Medicare system, primarily due to access to alternative health services. One such group is the military. As such, estimates of interstate migration

produced from the interstate migration model are adjusted to compensate for defence force movements not covered by Medicare. These adjustments are estimated using counts of defence force personnel by age, sex and state/territory, obtained from the Department of Defence, with 70% of any change in quarterly defence force numbers assumed to be due to interstate migration not otherwise covered by the model.

[Back to top](#)

2. REBASING AND RE-DERIVATION OF INTERSTATE MIGRATION

Due to the non-compulsory and non-universal nature of the available (indirect) data sources, post-censal quarterly estimates of interstate migration have long been considered the weakest component of population change. For this reason, the model for generating post-censal estimates of interstate migration is largely superseded when new census information becomes available (i.e. rebased to the Census).

Part of the process of rebasing census ERPs for states and territories is the re-derivation of interstate migration for the intercensal period. The overall approach is to minimise state intercensal discrepancy using information from the two census questions on usual residence one-year ago and five year ago to estimate interstate movements. Where this census information does not reduce the intercensal discrepancy, the rebased interstate migration estimates remain largely unchanged from the Medicare-based model.

For example, during rebasing of interstate migration estimates to the 2006 Census as seen in Table 1, for New South Wales, Victoria and Queensland the Medicare-based estimate was used in the re-derivation as it reduced intercensal discrepancy. Whereas for South Australia, Western Australia and the Australian Capital Territory the Census-based estimate was used in the re-derivation. For Tasmania and the Northern Territory a combination of Medicare and Census-based estimates were used to reduce the intercensal discrepancy. In these cases where the intercensal error was negative and closer to zero than the difference then the intercensal error was subtracted from the Medicare-based estimate and used for the re-derivation.

Interstate flows however, must always sum to zero, as for each arrival there should always be a corresponding departure. Therefore, an additional change is made to scale interstate migration levels for each state and territory so the total will sum to zero at the Australia level as seen in Table 1. This adjustment also takes into account all movements for each state and territory before prorating.

When the intercensal discrepancy is finalised the difference between the original interstate migration estimates and the rebased estimates is apportioned across all quarters, movement categories, ages and sexes in the intercensal period in order to minimise quarterly change.

TABLE 1. REBASING INTERSTATE MIGRATION ESTIMATES — 2001-06

	PROCESS FOR INTERCENSAL ERROR			PROCESS FOR INTERCENSAL DISCREPANCY			
	Medicare based estimate no.	Census based estimate no.	Difference (a) no.	Intercensal Error no.	Re- derivation no.	Zero-sum adj.Discrepancy no.	Intercensal no.
NSW	-136,330	-125,465	10,865	2,767	-136,330	-140,564	-1,467
Vic.	-2,197	-13,121	-10,924	-36,229	-2,197	-5,086	-39,118
Qld	164,362	147,890	-16,472	-24,034	164,362	160,495	-27,901

SA	-12,639	-10,192	2,447	-12,780	-10,192	-11,346	-11,487
WA	-1,399	3,993	5,392	-7,259	3,993	2,715	-3,145
Tas.	3,105	4,113	1,008	-793	3,898	3,329	-569
NT	-8,474	-4,514	3,960	-2,948	-5,526	-6,196	-670
ACT	-6,428	-2,375	4,053	-4,673	-2,375	-3,169	-1,414
OT(b)	..	-329	-329	234	-165	-178	56
Aust.	0	0	0	-85,715	15,468	0	-85,715
Sum(c)	..	..	..	..	..	..	85,771

.. not applicable

(a) Difference between Medicare and Census based estimates.

(b) Other Territories.

(c) Sum of absolute values for states and territories excluding Other Territories.

[Back to top](#)

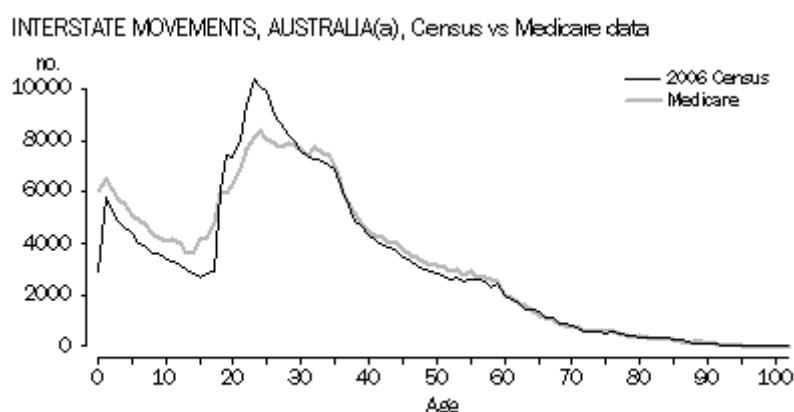
3. REVIEW OF INTERSTATE MIGRATION METHOD

Post-censal quarterly estimates of net interstate migration are created for the states and territories using interstate change of address advised to Medicare Australia and to the Department of Defence in the case of the military. Medicare data are adjusted by means of expansion factors.

The ABS has reviewed the interstate migration model using finalised data from the **2006 Census of Population and Housing**. The outcome of this current review is similar to the previous model used to estimate interstate migration from 2001 to 2006. This review has focussed on the expansion factors applied to Medicare data. The defence force adjustment applied to interstate migration estimates was not reviewed.

Calculating expansion factors for Medicare data

Expansion factors applied to Medicare data were based on the estimated proportion of the population covered. To calculate this proportion, Medicare data for the period October 2005 to September 2006 was compared with 2006 Census data on persons' usual residence one year ago as seen in the graph below. The period of Medicare data chosen reflected the assumption that there is a lag in the registration of change of address through Medicare.



(a) Measured by change of address data from 2006 Census or from Medicare data.

Expansion factors, as shown in the equation below, were estimated for each state and territory, by sex, single year of age and movement category (arrivals/departures). Analysis showed that for all states and territories expansion factors on average, were greater than 1 (i.e. suggesting 'undercoverage' in Medicare data) for males aged 17-30 years and females aged 17-25 years. These age ranges were chosen as they decreased intercensal discrepancy the most when compared to any other range. Expansion factors are therefore applied universally for all states and territories to Medicare data with these age-sex

characteristics. For all other age groups, it is assumed that Medicare data provides a full coverage (i.e. an expansion factor of 1 was used). The equation used to calculate the expansion factors was:

$$ExpFactors = \frac{Census \times (proportion_of_multiple_movers)}{Medicare}$$

Multiple movers and census data

Some people will move more than once during a given time period, including some who move to one location, then return to their original location. However, the Census asks for each person's address one year ago without reference to multiple moves which could have occurred over the one year period.

Since Medicare data do include information on multiple/return movements, these were used as a proximate to adjust data from the 2006 Census. The proportion of multiple movers identified using Medicare data was calculated by dividing all quarterly movements by the number of final annual movements for each state or territory, by sex, single year of age and movement category (arrivals/departures). Calculations showed that 7% of all movements were multiple movements. Those who had moved twice represented 6% of all movements whereas those who moved more than twice only represented 1% of all movements.

The use of census data on address one year ago does introduce some potential problems because a relatively short (and therefore potentially more volatile and less representative) time period is used to estimate expansion factors. Smoothing used in generating the expansion factors, as seen in the many scenarios analysed, helps to address these problems.

[Back to top](#)

4. SCENARIOS ANALYSED

A number of scenarios were developed (although not all are listed in this paper) using Medicare data and data from the 2006 Census. The complete process of estimating interstate migration for the intercensal period (2001 to 2006) and final rebasing was replicated for each scenario. These scenarios vary in their use of expansion factors, lagging, smoothing and other adjustments, and were each used to estimate June 2006 ERP by state/territory. The extent to which each scenario matched final June 2006 ERP, or in other words reduced intercensal discrepancy, was used as an indication of its accuracy in modelling interstate migration (refer to **Scenario outcomes** below). The reasonableness of assumptions in each scenario was also taken into account.

Some of the scenarios used in the interstate migration review are summarised in the following table with their components described in more detail further in this paper.

TABLE 2. INTERSTATE MIGRATION REVIEW, Scenarios analysed

SCENARIO	INPUT DATA(a)			EXPANSION FACTORS	
	Census data adjusted(b)	Medicare lagged	All inputs smoothed or raw	Factors smoothed or raw	Factors Capped
S1	..	..	Raw	No factors applied	..
S2	..	..	Raw	Raw	..
S3	Age adjusted	..	Raw	Raw	..
S4	Age adjusted	Lagged	Raw	Raw	..

S5	Age adjusted	Lagged	Smoothed	Raw	..
S6	..	Lagged	Smoothed	Raw	..
S7(c)	..	Lagged	Smoothed	Raw	Capped
S8	..	Lagged	Smoothed	Smoothed	Capped
S9	..	Lagged	Smoothed	Smoothed	..
S10	..	Lagged	Raw	Smoothed	..

.. not applicable

(a) Input data for expansion factors includes Census, Medicare and multiple movers.

(b) Census data adjusted for age at move.

(c) Scenario 7 is the preferred model.

Lagging of Medicare data

Analysis has shown that registration of changes of address through Medicare generally occurs some time after the actual move. The interstate migration models for both 1996-2001 and 2001-2006 assumed an average registration lag of three months (one quarter), so Medicare information for a particular quarter was used to estimate interstate migration for the previous quarter. It is not possible to lag this data further (i.e. to assume a delay in registration of more than three months) as this would impact on the production and publication of population estimates which are released within 6 months after the reference period.

The first scenario considered (S1) assumes that Medicare changes of address perfectly capture all interstate movements (i.e. no undercoverage), and that there is no delay between persons moving address and registering a change with Medicare (i.e. no lagging). These assumptions are known to be false, but are used to provide a baseline for later scenarios. While the results from S1 appeared reasonable for some states when compared with the actual intercensal discrepancy as seen in Table 3, this may be due to errors in interstate arrivals and departures (such as those due to undercoverage and lagging) cancelling each other out.

Comparison of the outcomes of most scenarios tested (although not all are listed in this paper) indicated that the use of lagging reduced intercensal discrepancy particularly at the overall level as seen in the sum of absolutes in Table 3. Later scenarios tested alternative methods of applying expansion factors (smoothing input data and/or smoothing the factors produced), adjusting census data for the age at move, as well as the impact of imposing an upper limit (or 'cap') on the factors.

Smoothing

It was assumed that much of the variability in data from one single-year age group to the next was due to 'random noise', so smoothing was incorporated in some form in many of the scenarios analysed. Two options for smoothing were used in the production of some expansion factors. Firstly, for each state/territory, sex and movement category, all the input data used to calculate expansion factors were smoothed across single years of age, using a three-term moving average as applied in scenarios S5 to S9. The second option was to smooth the actual output (or expansion factors), again using a three-term moving average as applied in scenarios S8 to S10.

Overall, smoothing of expansion factors produced only small improvements in the estimated levels of intercensal discrepancy; in some cases, results were worsened when the factors were smoothed. Greater improvements (represented by smaller intercensal discrepancies) were gained by smoothing the inputs of Medicare and census data used to produce the expansion factors. For most states and territories, the best results were found in those scenarios from which expansion factors were created using smoothed input data.

Capping expansion factors

In the interstate migration model used for 1996-2001, expansion factors calculated as being greater than 2 (i.e. less than 50% coverage estimated for Medicare data) were set to 2. The rationale for 'capping' expansion factors was that this would reduce the influence of outlying extreme results, such as unusually low registrations in particular age/sex groups. In the 2001-06 review capping was applied to expansion factors of some scenarios but did not produce improvements in the intercensal discrepancy.

For this review (2006-11) which has used the most recent data available, analysis of the various scenarios and subsequent expansion factors showed that capping produced improvements in most cases. Scenario S7 (the preferred model) is an improvement on scenario S6 by using capping which has decreased intercensal discrepancy. The only outlying group of interstate movers for which capping has applied during this review is males aged 23 to 25 departing the Northern Territory.

Census data adjustment - age at move

The age of interstate migrants taken from census information on a persons usual residence one year ago is the age at census night - not the age at move. Therefore this adjustment assumes half of the population were one year younger at date of move than at date of the Census. It was calculated by pairing each consecutive single year of age and dividing by two as seen in the equation below:

$$\text{Census_age_18} = \frac{(\text{movers_aged_17}) + (\text{movers_aged_18})}{2}$$

While this adjustment provided similar results to the preferred scenario, it was not chosen as it did not reduce the intercensal discrepancy for the state with the highest counts. For example persons for Victoria was slightly higher in scenario S5 than in scenario S7 (the preferred model) as seen in Table 3.

[Back to top](#)

5. SCENARIO OUTCOMES

Table 3 below shows the actual intercensal discrepancy (both in terms of persons and as a percentage of final 30 June 2006 ERP) for 2001-06. It also shows the intercensal discrepancy produced under each scenario tested. For each scenario the complete process of estimating interstate migration for the intercensal period (2001 to 2006) and final rebasing has been replicated. The following table summarises these outcomes for each scenario.

TABLE 3. INTERCENSAL DISCREPANCY, Actual and Scenario examples — 2001 to 2006

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Sum(a)
PERSONS (No.)									
Actual	-1,467	-39,118	-27,901	-11,487	-3,145	-569	-670	-1,414	-85,771
Scenario outcome(b)									
S1	428	-40,095	-28,757	-11,556	-3,158	-584	-651	-1,398	-86,627
S2	-3,015	-39,054	-26,267	-11,538	-3,192	-588	-685	-1,432	-85,771
S3	-4,546	-38,800	-24,785	-11,604	-3,248	-619	-711	-1,457	-85,770

S4	-4,384	-39,912	-23,999	-11,556	-3,205	-598	-688	-1,428	-85,771
S5	-3,021	-40,220	-25,434	-11,447	-3,099	-542	-638	-1,371	-85,772
S6	-2,959	-39,926	-25,729	-11,460	-3,119	-548	-648	-1,383	-85,772
S7(c)	-2,984	-39,950	-25,748	-11,443	-3,100	-540	-637	-1,371	-85,772
S8	-2,632	-40,036	-25,943	-11,461	-3,121	-549	-648	-1,383	-85,772
S9	-2,614	-40,019	-25,929	-11,473	-3,134	-555	-656	-1,391	-85,772
S10	-3,889	-39,971	-24,727	-11,476	-3,128	-559	-645	-1,378	-85,772

PERCENTAGE OF FINAL 30 JUNE 2006 ERP (%)

Actual	-0.02	-0.76	-0.68	-0.73	-0.15	-0.12	-0.32	-0.42	-3.21
Scenario outcome(b)									
S1	0.01	-0.78	-0.70	-0.74	-0.15	-0.12	-0.31	-0.42	-3.23
S2	-0.04	-0.76	-0.64	-0.74	-0.15	-0.12	-0.33	-0.43	-3.21
S3	-0.07	-0.76	-0.61	-0.74	-0.16	-0.13	-0.34	-0.44	-3.23
S4	-0.06	-0.78	-0.59	-0.74	-0.16	-0.12	-0.33	-0.43	-3.20
S5	-0.04	-0.78	-0.62	-0.73	-0.15	-0.11	-0.30	-0.41	-3.16
S6	-0.04	-0.78	-0.63	-0.73	-0.15	-0.11	-0.31	-0.41	-3.17
S7(c)	-0.04	-0.78	-0.63	-0.73	-0.15	-0.11	-0.30	-0.41	-3.16
S8	-0.04	-0.78	-0.63	-0.73	-0.15	-0.11	-0.31	-0.41	-3.17
S9	-0.04	-0.78	-0.63	-0.73	-0.15	-0.11	-0.31	-0.42	-3.18
S10	-0.06	-0.78	-0.60	-0.73	-0.15	-0.11	-0.31	-0.41	-3.16

(a) Sum of absolute values. Excludes Other Territories.

(b) Estimated intercensal discrepancy produced under each scenario.

(c) Scenario 7 is the preferred model.

Assessing Model/Scenario quality

The alternative interstate migration models (scenarios) were assessed using two main criteria.

- Models were assessed on the basis of the resulting intercensal discrepancy for each state and territory for June 2006 (refer to **Rebasing and re-derivation of interstate migration** above). In part, the aim was to reduce the overall intercensal discrepancy (i.e. reduce the sum of absolute percentage values) while still reducing it for the state or territory with the highest count. Each model had been applied over the 2001 to 2006 intercensal period so intercensal discrepancy could be compared as seen in Table 3. Intercensal discrepancy is the remaining unattributable difference between the ERP counts at 30 June 2006 after all components of population change have been finalised and the final ERP at 30 June 2006 based on the 2006 Census. Refer to **Attachment 1** for ERP and components of change for 2001 to 2006.
- Models also had to make intuitive sense. This second criteria was included to avoid problems associated with selecting non-intuitive models which could coincidentally produce lower intercensal discrepancies. Similarly, it was important that any relationships assumed by the model finally proposed were considered to be sustainable over the next intercensal period from 2006 to 2011.

It was also desirable (but not essential) that all states and territories shared the same model. This preference stemmed from a concern that models developed for individual states might be effective in reproducing interstate migration for the 2001 to 2006 intercensal period, without adequately describing the underlying relationships between Medicare data and total interstate movers. As a result, such models would not translate well in estimating interstate migration after 30 June 2006. For this review all states and territories have shared the same model.

Preferred model

Results from scenarios 1-10 indicated that the preferred interstate model should contain the following characteristics:

- Lagging of Medicare input data by three months (both for calculating expansion factors and for estimating progressive quarters of interstate migration);
- Smoothing of input data (Census, Medicare and multiple movers) used to produce expansion factors;
- Capping applied to expansion factors;
- Expansion factors applied to males aged 17 to 30 years and females aged 17 to 25.

This preferred model was reflected in scenario seven (S7) and provided the best overall results. Although the various scenarios display little variation to each other as seen in Table 3, the preferred scenario (S7) was able to reduce the overall intercensal discrepancy while still reducing it slightly for Victoria, the state with the highest count. In addition S7 was able to improve on the actual original intercensal discrepancy by reducing the sum of absolute percentage values from 3.21 (actual) to 3.16 (S7).

The ABS will apply this model to produce interstate migration estimates each quarter for the current intercensal period (i.e. September quarter 2006 to June quarter 2011) and onwards until once again a review is undertaken after data from the **2011 Census of Population and Housing** has been finalised. A defence force adjustment will continue to be applied to estimates produced by this model to compensate for movements of defence force personnel not covered by Medicare.

[Back to top](#)

6. PREVIOUS INTERSTATE MIGRATION METHODS USED

For information on the method used for estimating interstate migration for the intercensal period 1996 to 2001 see: **Demography Working Paper 1999/2 - Estimating Interstate Migration, 1996-2001** (cat. no. 3116.0). The method used in estimating interstate migration for the most recent intercensal period 2001 to 2006 is detailed in **Demography Working Paper: 2004/1, Review of Interstate Migration Method, May 2004** (cat. no. 3106.0.55.001).

FURTHER INFORMATION

For further information on the interstate migration method, contact Neil Scott on Canberra (02) 6252 5959, or email your comments to the attention of Neil Scott at demography@abs.gov.au.

[Back to top](#)

ATTACHMENT 1: ERP AND COMPONENTS OF CHANGE, 2001 to 2006

Tables A1 and A2 below show how the demographic balancing equation is calculated between the 2001 and 2006 Censuses. Two tables have been presented to be able to clearly show data for all states and territories. Each table contains preliminary net interstate migration (unrebased) and final net interstate migration (rebased). They show how each contribute to ERP and help generate an intercensal error or an intercensal discrepancy. For example, preliminary net interstate migration which has used modelled Medicare data for quarterly interstate migration estimates, will contribute to the intercensal error. Whereas intercensal discrepancy is the remaining unattributable difference between the two different

ERP counts at 30 June 2006. One count is after all components of population change (including interstate migration) have been finalised and the other count is the final ERP at 30 June 2006 based on the 2006 Census.

TABLE A1. ERP AND COMPONENTS OF CHANGE — Selected States, 2001 to 2006 ('000)

	NSW '000	Vic. '000	Qld '000	SA '000	Aust.(a) '000
With preliminary net interstate migration					
ERP, 30 June 2001	6,575.2	4,804.7	3,628.9	1,511.7	19,413.2
+ final natural increase	191.1	143.9	132.1	28.2	601.4
+ final NOM(b)	188.9	143.9	141.5	27.8	597.5
+ preliminary NIM(c)	-136.3	-2.2	164.4	-12.6	0.0
=unrebased ERP, 30 June 2006	6,818.9	5,090.3	4,066.9	1,555.1	20,612.2
Final rebased ERP, 30 June 2006	6,816.1	5,126.5	4,090.9	1,567.9	20,697.9
Intercensal error (difference)	2.8	-36.2	-24.0	-12.8	-85.7
With final net interstate migration					
ERP, 30 June 2001	6,575.2	4,804.7	3,628.9	1,511.7	19,413.2
+ final natural increase	191.1	143.9	132.1	28.2	601.4
+ final NOM(b)	188.9	143.9	141.5	27.8	597.5
+ final NIM(c)	-140.6	-5.1	160.5	-11.3	0.0
= ERP, 30 June 2006 (with components finalised)	6,814.6	5,087.4	4,063.0	1,556.4	20,612.2
Final rebased ERP, 30 June 2006	6,816.1	5,126.5	4,090.9	1,567.9	20,697.9
Intercensal discrepancy (difference)	-1.5	-39.1	-27.9	-11.5	-85.7

(a) Includes Other Territories.

(b) NOM - Net overseas migration.

(c) NIM - Net interstate migration.

TABLE A2. ERP AND COMPONENTS OF CHANGE — Selected States, 2001 to 2006 ('000)

	WA '000	Tas. '000	NT '000	ACT '000	Aust.(a) '000
With preliminary net interstate migration					
ERP, 30 June 2001	1,901.2	471.8	197.8	319.3	19,413.2
+ final natural increase	68.7	10.0	13.9	13.5	601.4
+ final NOM(b)	83.7	4.2	4.5	3.0	597.5
+ preliminary NIM(c)	-1.4	3.1	-8.5	-6.4	0.0
=unrebased ERP, 30 June 2006	2,052.1	489.2	207.7	329.4	20,612.2
Final rebased ERP, 30 June 2006	2,059.4	490.0	210.6	334.1	20,697.9
Intercensal error (difference)	-7.3	-0.8	-2.9	-4.7	-85.7
With final net interstate migration					
ERP, 30 June 2001	1,901.2	471.8	197.8	319.3	19,413.2
+ final natural increase	68.7	10.0	13.9	13.5	601.4
+ final NOM(b)	83.7	4.2	4.5	3.0	597.5
+ final NIM(c)	2.7	3.3	-6.2	-3.2	0.0
= ERP, 30 June 2006 (with components finalised)	2,056.2	489.4	210.0	332.7	20,612.2
Final rebased ERP, 30 June 2006	2,059.4	490.0	210.6	334.1	20,697.9
Intercensal discrepancy (difference)	-3.1	-0.6	-0.7	-1.4	-85.7

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- (a) Includes Other Territories.
 - (b) NOM - Net overseas migration.
 - (c) NIM - Net interstate migration.

[Back to top](#)

About this Release

This information paper reviews the interstate migration model using Medicare data with new updated expansion factors.

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